

## **REMARKS/ARGUMENTS**

Solely in order to expedite prosecution, claim 1 has been amended to additionally recite the features of claims 6, 8 and 9 which have been canceled. In addition, independent claims 10 and 13 have been amended to additionally recite features recited in other dependent claims which also have been canceled solely in order to expedite prosecution. Accordingly, the applicant reserves the right to pursue claims of the original scope in a continuation. The Examiner's rejections are fully traversed below.

**(a) *Lindwer* does NOT teach or suggest a set of virtual machine instructions such that least one virtual machine instruction in the set represents at least one operation which cannot be represented by any of the Java Bytecode executable instruction** (claim 1)

In the Final Office Action, the Examiner has asserted that the *Lindwer* teaches this feature (Final Office Action, paragraph 8 on page 4). In order to support this assertion, the Examiner has cited *Lindwer* Col. 12, lines 60-67 which is reproduced below for the Examiner's convenience.

The sub-table may, but does not need to, correspond to a complete sequence of native instructions corresponding to one virtual machine instruction. The sub-table may be shorter than the sequence, in which case it is preferred that the sequence continues in the sequentially next sub-table. In practice it may be preferred to choose a sub-table size of only 4 or 8 native instructions, which may be less than the maximum sequence of native instructions for a virtual machine instruction.

Contrary to the Examiner's assertion (Final Office Action, page 4, paragraph 8), it is very respectfully submitted that the cited section of *Lindwer* does NOT teach a set of virtual machine instructions such that at least one virtual machine instruction in the set represents at least one operation which cannot be represented by any of the Java Bytecode executable instructions.

Furthermore, it is respectfully submitted that *Lindwer* does NOT teach or even remotely suggest this feature.

**(b) Lindwer does NOT teach or suggest representing a virtual machine instruction internally in a virtual machine by a pair of streams** (claim 1)

Contrary to the Examiner's assertion (Final Office Action, paragraph 10 on page 4), it is respectfully submitted that the *Lindwer* does not teach representing a virtual machine instruction internally in a virtual machine by a pair of streams. It is earnestly believed that it is evident that the Examiner's assertion is NOT supported by any of the cited sections of *Lindwer* (Col. 6, lines 46-52, Col. 8, lines 14-20 and Col. 14, lines 45-50).

Furthermore, it is respectfully submitted that the *Lindwer* does NOT teach or even remotely suggest this feature.

**(c) Lindwer does NOT teach or suggest a set of virtual machine instructions such that every one of a plurality of Java executable instructions can be replaced by at least one virtual machine in the set of virtual machine instruction which consists of a number of instructions which is less than the number of the Java executable instructions** (claim 1)

Contrary to the Examiner's assertion (Final Office Action, paragraph 4 on page 2), it is very respectfully submitted that the *Lindwer* does not teach a set of virtual machine instructions such that every one of a corresponding Java Bytecode executable instructions can be represented by at least one of the virtual machine instructions in a set of virtual machine instructions. It is noted that *Lindwer* states that sequences of virtual machine instructions which occur frequently in compiled code can be replaced by newly defined additional virtual machine instructions, where, for instance, one new instruction replaces a sequence of four existing instructions (*Lindwer*, Col. 1, lines 60-65). However, it is respectfully submitted that replacing a sequence of virtual machine instructions by one instruction (i.e., a Marco instruction) does NOT teach or suggest: a set of virtual machine instructions such that every one of a corresponding Java Bytecode executable instructions can be represented by at least one of the virtual machine instructions in the set of virtual machine instructions. Clearly, *Lindwer* does not teach replacing each one of the instructions in the sequence of virtual machine

instructions. Rather, *Lindwer* teaches replacing a plurality (i.e. four instructions) of instructions in a frequency occurring compiled sequence by a new instruction.

**(d) *Lindwer* does NOT teach or suggest selecting and loading a virtual machine instruction from the set of virtual machine instructions (discussed above) (claim 10)**

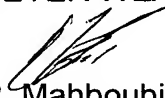
It is respectfully submitted that *Lindwer* does NOT teach or suggest selecting a virtual machine from the set (discussed above) and loading it into the virtual machine. It should also be noted that *Lindwer* states that the "sequences of virtual machine instructions which occur frequently in compiled code can be replaced (*Lindwer*, Col. 1, lines 60-65). However, it is respectfully submitted that *Lindwer* does NOT teach receiving a Java Bytecode and selecting and loading into a virtual machine a corresponding virtual machine instruction from the claimed set discussed above.

### **CONCLUSION**

Based on the foregoing, it is submitted that all pending claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed because the limitations discussed above are sufficient to distinguish the claimed invention from the cited art. Accordingly, Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. SUN1P811). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,  
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